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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
09/902,193	07/10/2001	John A. Samuels	200-007752-US (D01)	8407				
2512 PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824	7590 08/24/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">ADDY, THJUAN KNOWLIN</td></tr></table>		EXAMINER		ADDY, THJUAN KNOWLIN	
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			<table border="1"><tr><td>MAIL DATE</td><td>DELIVERY MODE</td></tr><tr><td>08/24/2007</td><td>PAPER</td></tr></table>	MAIL DATE	DELIVERY MODE	08/24/2007	PAPER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/902,193

Applicant(s)

SAMUELS, JOHN A.

Examiner

Thjuan K. Addy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on May 30, 2007 has been entered. No claims have been amended. Claims 1-25 have been cancelled. No claims have been added. Claims 26-61 are still pending in this application, with claims 26 and 40 being independent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 26-50 and 56-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dent (US Patent Application, Pub. No.: US 2003/0060195 A1), in view of Phillips et al (US 6,072,994).

3. In regards to claims 26, 40, and 58, Dent discloses a dual mode receiver and transmitter (e.g., dual mode telephone/phone, See Fig. 1) operable to receive signals in a first mode (See Fig. 2 and GSM mode) having an associated first channel spacing, and to receive signals in a second mode (See Fig. 2 and satellite mode) having an associated second channel spacing smaller than the first channel spacing (See pg. 3, paragraph [0030] – [0031], comprising: first and second front-end RF stages for

receiving a signal transmitted in the first mode and the second mode, respectively.

Dent, however, does not disclose supplying a further signal to RF circuitry operable at an intermediate frequency common to each mode of operation. Phillips, however, does disclose supplying a further signal to RF circuitry operable at an intermediate frequency common to each mode (e.g., analog mode and digital mode) of operation (See col. 21-22 lines 66-16). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to incorporate this feature within the system, as a way of eliminating the need for high-speed parallel bus interfaces between modules.

4. In regards to claims 27 and 41, Dent discloses a receiver and transmitter, comprising two frequency down-conversion stages (See pg. 1, paragraph [0011] and pg. 4, paragraph [0046]).

5. In regards to claims 28, 32, 37, 42, 45, 49, and 59, Dent discloses a receiver and transmitter, wherein a synthesizer (See Fig. 3 and synthesizer 400) associated with one frequency down-conversion stage has a frequency resolution equal to the channel spacing associated with the received signal (See pg. 1, paragraph [0011] and pg. 4, paragraph [0046]).

6. In regards to claims 29, 33, 38, 43, 46, and 50, Dent discloses a receiver and transmitter, wherein a synthesizer (See Fig. 2, synthesizer 34 and Fig. 3, synthesizer 400) associated with another frequency down-conversion stage has a frequency resolution wider than the channel spacing associated with the received signal (See pg. 3, paragraph [0030] – [0031] and pg. 4, paragraph [0046] – [0047]).

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7. In regards to claim 30, Dent discloses all of claim 30 limitations, except a receiver, operable to convert signals received in the first mode and the second mode directly to a common intermediate frequency. Phillips, however, does disclose a receiver, operable to convert signals received in the first mode (e.g., analog mode) and the second mode (e.g., digital mode) directly to a common intermediate frequency (See col. 21-22 lines 66-16).

8. In regards to claims 31, 35, 36, 44, 48, 60, and 61, Dent discloses a receiver and transmitter, further comprising: a first antenna (See Fig. 1 and 900 MHz Antenna) for receiving a first signal in the first mode (e.g., GSM mode); a filter (See Fig. 2, IF filter/amplifier 54 and low-pass filter {47}) associated with the first antenna for selecting signals lying in a predetermined first frequency band; a first mixer (See Fig. 2 and VCO 40) for mixing the received first signal with a first local oscillator signal; a second antenna (See Fig. 1 and 1525-1660 MHz Antenna) for receiving a second signal in the second mode (e.g., satellite mode); a filter (See Fig. 2, IF filter/amplifier 55 and low-pass filter {LPF} 46) associated with the second antenna for selecting signals lying in a predetermined second frequency band; a second mixer (See Fig. 2 and VCO 41) for mixing the received second signal with a second local oscillator signal; a switch (See Fig. 3 and transmit/receive switch 107) for selecting between signals received in the first mode and the second mode having as an output, the output of the first mixer or the second mixer; and a third mixer (See Fig. 2 and mixer 42) for mixing the output of the switch with a third local oscillator signal to produce a signal suitable for base band processing (See pg. 3, paragraph [0030] – [0031]).

9. In regards to claims 34, 39, and 47, Dent discloses a receiver and transmitter, wherein the first local oscillator signal is produced by a combined output of the first and the second synthesizers (See pg. 3, paragraph [0030] – [0031] and pg. 4, paragraph [0046] – [0047]).

10. Dent discloses all of claim 56 limitations, except a receiver or transmitter, wherein the first channel spacing is 200 KHz. Dent, however, discloses a receiver or transmitter, wherein the first channel spacing is 6MHz (See pg. 3, paragraph [0038]). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to use 200 KHz as the first channel spacing, as a way of providing a first channel spacing that is wider than the second channel spacing.

11. Dent discloses all of claim 57 limitations, except a receiver or transmitter, wherein the second channel spacing is 41.67 KHz or 25 KHz. Dent, however, discloses a receiver or transmitter, wherein the second channel spacing is 450 KHz (See pg. 3, paragraph [0038]). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to use 41.67 KHz or 25 KHz as the second channel spacing, as a way of providing a second channel spacing that is smaller than the first channel spacing.

12. Claims 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dent (US Patent Application, Pub. No.: US 2003/0060195 A1), in view of Phillips et al (US 6,072,994), and further in view of Ramesh et al (US 5,943,324).

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13. Dent and Phillips disclose all of claim 51 limitations, except a receiver or transmitter, operable with a terrestrial cellular communication system in the first mode. Ramesh, however, discloses a receiver or transmitter (See Fig. 2, Fig. 4, Fig. 6, dish antenna 215, antenna 400, and receiver 610), operable with a terrestrial cellular communication system (See Fig. 2 and terrestrial cellular network 100) in the first mode (See col. 4 lines 21-42). Therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention to make the receiver or transmitter operable with a terrestrial cellular communication system in the first mode, as a way of allowing the receiver or transmitter to be able to operate within a cellular communication system.

14. Dent and Phillips disclose all of claim 52 limitations, except a receiver or transmitter, operable with a satellite communication system in the second mode. Ramesh, however, discloses a receiver or transmitter, operable with a satellite communication system in the second mode (See col. 2-3 lines 63-15, col. 5 lines 16-31, and col. 5-6 lines 54-12).

15. Dent and Phillips disclose all of claim 53 limitations, except a receiver or transmitter, wherein the terrestrial cellular communication system is GSM. Ramesh, however, discloses a receiver or transmitter, wherein the terrestrial cellular communication system is GSM (See col. 5 lines 16-31 and col. 8-9 lines 52-1).

16. Dent and Phillips disclose all of claim 54 limitations, except a receiver or transmitter, wherein the satellite system is IRIDIUM. Ramesh, however, discloses a receiver or transmitter, wherein the satellite system is ICO (See col. 2 lines 16-22 and

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col. 4 lines 22-22), therefore, it would have been obvious for one of ordinary skill in the art at the time of the invention, to use IRIDIUM as the satellite system.

17. Dent and Phillips disclose all of claim 54 limitations, except a receiver or transmitter, wherein the satellite system is ICO. Ramesh, however, discloses a receiver or transmitter, wherein the satellite system is ICO (See col. 2 lines 16-22 and col. 4 lines 22-22).

Response to Arguments

18. Applicant's arguments with respect to claims 26-61 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

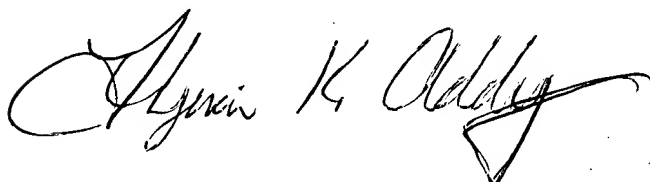
19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Smith et al (US 6,389,059) teach a multi-band, multi-mode spread-spectrum communication system. Umemoto et al (US 6,049,722) teach a radio communication apparatus for use in dual-mode radio communication system and having factor variable control means dependent on the set mode. Dixon et al (US 5,291,516) teach a dual mode transmitter and receiver. Suzuki (US 5,179,360) teaches a transmitting/receiving apparatus switchable between digital and analog modulation modes.

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20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thjuan K. Addy whose telephone number is (571) 272-7486. The examiner can normally be reached on Mon-Fri 8:30-5:00pm.

21. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar can be reached on (571) 272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

22. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Thjuan K. Addy', with a stylized, looped flourish at the end.

Thjuan K. Addy
Patent Examiner
AU 2614